

# **Exhibit 3**

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF OKLAHOMA**

PETER POE, et al.,

*Plaintiffs,*

v.

GENTNER DRUMMOND, et al.,

*Defendants.*

Case No. 23-CV-00177-JFH-SH

**EXPERT REBUTTAL DECLARATION OF JACK TURBAN, M.D.**

I, Jack Turban, M.D., hereby declare and state as follows:

1. I have been retained by counsel for Plaintiffs as an expert in connection with the above-captioned litigation. I am over 18 years of age, of sound mind, and in all respects competent to testify.

2. I have actual knowledge of the matters stated herein.

3. I have reviewed the declarations and reports of Drs. James Cantor, Michael Laidlaw, Angela Thompson, and Curtis Harris submitted by Defendants in support of their response to Plaintiffs' motion for a preliminary injunction. Here, I respond to some of the central points in those declarations and reports. I do not specifically address each study or article cited, but instead explain the overall problems with some of the conclusions that Defendants' experts draw and provide data showing why such conclusions are in error. The materials I have relied upon in preparing this declaration are the same types of materials that experts in my field of study regularly rely upon when forming opinions on the subject. I may wish to supplement these

opinions or the bases for them as a result of new scientific research or publications or in response to statements and issues that may arise in my area of expertise.

**DEFENDANTS’ EXPERTS’ CLAIM THAT OKLAHOMA’S BAN ON GENDER-AFFIRMING MEDICAL CARE FOR ADOLESCENT GENDER DYSPHORIA IS CONSISTENT WITH INTERNATIONAL CONSENSUS IS NOT ACCURATE**

4. Defendants’ experts, who include experts in unrelated fields (e.g., Dr. Cantor is a pedophilia researcher, having never published original data in the field of child or adolescent gender dysphoria research, and having never treated any child or adolescent for gender dysphoria), present views that do not align with mainstream psychiatry or medicine,<sup>1</sup> as it pertains to the treatment of adolescents with gender dysphoria. Defendants’ experts rely on reports from a handful of European countries and imply that Oklahoma’s ban on gender-affirming medical care is in line with “international consensus.” (See Cantor, ¶¶ 16-34). This is not accurate. Of note, the vast majority of these reports were not peer-reviewed – meaning, the reports and their conclusions were not formally reviewed by other experts in the field so that they could be published in reputable academic journals. Some of these reports are older and do not include the most recent research demonstrating the efficacy of the banned treatments. And others do not include all of the relevant literature.

5. Defendants’ experts attempt to misleadingly bolster the importance of these reports from select European countries by calling them “systematic reviews.” But all a “systematic review” means is that the authors of the reports pre-defined the search terms they used when conducting literature reviews in various databases.<sup>2</sup> The primary advantage to a systematic review

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<sup>1</sup> All major medical organizations including The American Medical Association, The American College of Physicians, The American Psychiatric Association, The American Academy of Child & Adolescent Psychiatry, The American Academy of Pediatrics, and The Endocrine Society, among others, oppose legislation banning gender-affirming medical interventions for adolescent gender dysphoria. For a list of statements from these medical organizations, please see:

<sup>2</sup> Harvard Countway Library. Systematic Reviews and Meta Analysis Q&A. Accessed: July 6, 2023. Available at: <https://guides.library.harvard.edu/meta-analysis/GettingStarted>. Also, NB: Some systematic reviews apply what is

would be to identify research publications that had not previously been identified in this discussion. The reports cited by Defendants' experts did not identify any such new research, and certainly no research that discounts the conclusions from my initial report.

6. Perhaps most importantly, though, Defendants' experts fail to emphasize that *none* of the European nations they reference have banned gender-affirming medical care for adolescents with gender dysphoria as Oklahoma's ban does. Rather, the select countries referenced have changed the way in which gender-affirming care is being delivered (*e.g.*, moving care to settings where more data can be collected, as in Sweden, or creating several regional clinics instead of one centralized clinic, as in the United Kingdom). Rather than put it in line with "international consensus," Oklahoma's broad ban on gender-affirming medical care for adolescent gender dysphoria puts the law squarely outside of mainstream medical views and policies not just in the United States, but around the world. In the United States, the major relevant expert medical organizations (*e.g.*, the American Medical Association, the American Academy of Pediatrics, the American Psychiatric Association, and the American Academy of Child & Adolescent Psychiatry, among others) explicitly oppose such bans.<sup>3</sup> As an additional point, if other nations were, due to political rather than scientific forces, ban a type of medical treatment, it would not immediately follow that such bans are advisable or based on scientific evidence.

#### **DEFENDANTS' EXPERTS MISREPRESENT THE GENDER-AFFIRMING MODEL OF CARE FOR ADOLESCENT GENDER DYSPHORIA**

7. Defendants' experts note that adolescents presenting to gender clinics may have complex psychiatric presentations including autism spectrum disorder, borderline personality

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called a "meta-analysis," in which they apply quantitative methods to the articles identified by the reviews to statistically summarize their findings. The reports referenced by Defendants' experts do not implement this methodology.

<sup>3</sup> For a list of statements from major medical organizations opposing legislative bans on gender-affirming medical care for adolescent gender dysphoria, please see Turban, J. L., Kraschel, K. L., & Cohen, I. G. (2021). Legislation to criminalize gender-affirming medical care for transgender youth. *JAMA*, 325(22), 2251-52.

disorder, or body dysmorphic disorder, among other diagnoses. It is important to note that the current standards of care require a biopsychosocial mental health assessment prior to initiating gender-affirming medical interventions for minors.<sup>4</sup> Such mental health assessments exist to distinguish other mental health conditions from gender dysphoria and to determine if gender-affirming medical interventions may be appropriate or not. While there has been rhetoric such as “affirmation on demand” used by Defendants’ experts (Cantor, ¶ 257), this is not the reality of how gender-affirming medical care for adolescents is delivered under existing guidelines. As the WPATH Standards of Care note, this biopsychosocial assessment is often extended “for youth with more complex mental health presentations (e.g., complicating mental health histories), co-occurring autism spectrum characteristics, or an absence of experienced childhood gender incongruence.”<sup>5</sup> Oklahoma’s ban did not merely ban gender-affirming medical care for adolescent gender dysphoria when existing guidelines are not followed (i.e., without a comprehensive biopsychosocial mental health assessment); it banned it across the board, including for those patients who have been receiving treatment in accordance with the standards set forth in clinical practice guidelines.

**THOUGH RANDOMIZED CONTROLLED TRIALS OFTEN REPRESENT  
HIGHER QUALITY EVIDENCE THAN OTHER STUDY DESIGNS, THEY ARE NOT  
ETHICAL IN THE REALM OF GENDER-AFFIRMING CARE FOR ADOLESCENT  
GENDER DYSPHORIA AND EXISTING RESEARCH PROVIDES VALUABLE  
INFORMATION ON QUESTIONS OF CORRELATION VERSUS CAUSATION**

8. Defendants’ experts spend a great deal of time focusing on randomized controlled trial study designs and questions of correlation versus causation. It is true that randomized controlled trials provide valuable information that other studies do not; however, because of the

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<sup>4</sup> Coleman, E., Radix, A. E., Bouman, W. P., Brown, G. R., De Vries, A. L. C., Deutsch, M. B., ... & Arcelus, J. (2022). Standards of care for the health of transgender and gender diverse people, version 8. *International Journal of Transgender Health*, 23(sup1), S1-S259.

<sup>5</sup> *Id.*

existing body of literature tying gender-affirming medical care to improved mental health outcomes for adolescents with gender dysphoria, it is not considered ethical to randomize such adolescents to placebo treatments. Such randomized controlled trials would not be approved by an Institutional Review Board (the ethical boards at universities that decide if research is allowed to proceed). Though each study regarding the benefits of gender-affirming medical care for adolescent gender dysphoria (as with all studies in medicine) has relative strengths and weaknesses, examining the body of literature as a whole provides a rich scientific perspective.

9. As Dr. Cantor notes in his declaration, there are three possibilities when a study finds a correlation between two variables X and Y: “that X causes Y [causation], that Y causes X [reverse causation], or that there is some other variable Z, that causes both X and Y [confounding effect].” (Cantor, ¶ 60). In this case, the relevant question is whether gender-affirming medical care (X) causes improved mental health outcomes for adolescents with gender dysphoria (Y).

10. The question of “reverse causation” (*i.e.*, the notion that improved mental health causes one to access gender-affirming medical care rather than the reverse, that gender-affirming medical care leads to better mental health) has been examined in the literature. For example, in a recent major publication in *The New England Journal of Medicine*, Chen et al. used a technique called parallel process modeling and found that improvements in mental health tracked along with improvements in appearance congruence over time (a measure of the degree to which study participants’ bodies aligned with their gender identities), suggesting that gender-affirming medical care, and its subsequent physical effects, were the cause of the improvements in mental health.<sup>6</sup>

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<sup>6</sup> Chen, D., Berona, J., Chan, Y. M., Ehrensaft, D., Garofalo, R., Hidalgo, M. A., ... & Olson-Kennedy, J. (2023). Psychosocial Functioning in Transgender Youth after 2 Years of Hormones. *New England Journal of Medicine*, 388(3), 240-50.

This argues against reverse causation and in favor of these medical interventions *causing* the improvements in mental health this study detected.

11. The question of “confounding effect” has also been examined in several ways. For instance, a 2022 paper from our research group assessing the relationship between treatment with gender-affirming medical interventions during adolescence and improved mental health statistically adjusted for a range of potentially confounding variables including age, gender identity, sex assigned at birth, sexual orientation, race/ethnicity, level of family support for gender identity, relationship status, level of education, employment status, household income, having ever received pubertal suppression, having ever been exposed to gender identity conversion efforts, and having experienced any harassment based on gender identity in school.<sup>7</sup> Even after statistically adjusting for these potential confounding factors, the study found that treatment with gender-affirming medical care during adolescence was associated with lower odds of adverse mental health outcomes.

12. Another potential confounder that Defendants’ experts raise is whether participants received supportive psychotherapy in addition to gender-affirming medical care. Of note, there is no evidence-based psychotherapy that treats gender dysphoria itself, so such therapy is generally aimed at supporting the patient in general with their mental health. At least two studies provide evidence against the notion that mental health improvements were due to supportive psychotherapy rather than gender-affirming hormone treatment. In one study, Achille et al. ran regression analyses in order to separate out the impacts of gender-affirming medical interventions

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<sup>7</sup> Turban, J. L., King, D., Kobe, J., Reisner, S. L., & Keuroghlian, A. S. (2022). Access to gender-affirming hormones during adolescence and mental health outcomes among transgender adults. *PLoS One*, 17(1), e0261039.

from the impact of counseling and psychiatric medications.<sup>8</sup> Though the sample size made it difficult to detect differences, they nonetheless found that pubertal suppression was associated with better scores on the Center for Epidemiology Studies Depression Scale, which was a statistically significant finding.<sup>9</sup> A second study by Costa et al. examined two cohorts of adolescents with gender dysphoria. Both cohorts received six months of supportive psychotherapy for the initial six months of the study. For the next six months, one group continued to receive supportive psychotherapy alone, while the other received supportive psychotherapy *and* pubertal suppression. The group that received pubertal suppression in addition to psychotherapy experienced ongoing and statistically significant improvement in global functioning (measured by the Children’s Global Assessment Scale, CGAS) over that second course of six months, while the group that received ongoing supportive psychotherapy alone did not.<sup>10</sup>

13. Dr. Cantor spends considerable time in his lengthy declaration attempting to discredit existing studies (including those mentioned above). He does so based largely on critiques that are inapplicable to the various studies he applies them to. For example, Dr. Cantor claims that Achille et al. “failed to account for the multiple comparisons it conducted” and asserts that “had the study applied the standard adjustment for correcting for multiple comparisons, the remaining predictor would also have ceased to be statistically significant” (Cantor, ¶ 197). Though he doesn’t specify which “standard adjustment” technique he is referring to, Dr. Cantor is presumably

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<sup>8</sup> Achille, C., Taggart, T., Eaton, N. R., Osipoff, J., Tafuri, K., Lane, A., & Wilson, T. A. (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: preliminary results. *International Journal of Pediatric Endocrinology*, 2020(1), 1-5.

<sup>9</sup> It is important to note that in statistics, a statistically significant finding tells you that a finding is likely to represent a true effect and the finding wasn’t due to random chance. In contrast, the *lack* of a statistically significant finding doesn’t tell you one way or another if there is an effect. I would caution against over-interpreting non-statistically significant findings. Lack of a statistically significant finding doesn’t mean that no effect exists; it simply means the analysis in question does not tell the researchers one way or another if an effect exists.

<sup>10</sup> Costa, R., Dunsford, M., Skagerberg, E., Holt, V., Carmichael, P., & Colizzi, M. (2015). Psychological support, puberty suppression, and psychosocial functioning in adolescents with gender dysphoria. *The Journal of Sexual Medicine*, 12(11), 2206-14.



referring to techniques such as Bonferroni correction, which are designed to correct for comparisons in studies where large numbers of statistical tests are run. But such a correction would be inappropriate in studies such as Achille et al., which run a small number of statistical tests.<sup>11</sup> Dr. Cantor also critiques Costa et al., claiming that the results of this study are “moot”<sup>12</sup> because another publication from this clinic (Carmichael et al. 2021)<sup>13</sup> did not find “any significant improvement at all.” (Cantor, ¶ 196). What Dr. Cantor fails to explain is that this second paper *did not run any statistical analyses* on the CGAS global functioning score, which had shown statistically significant improvement in the first study. In the methods section, the authors explain that they only conducted statistical comparisons on other variables (CBCL, YSR, CBCL self-harm index, and YSR self-harm index).<sup>14</sup> In the discussion of Carmichael et al. 2021, the authors highlight, “CGAS scores in this previous study [Costa et al. 2015] increased from 61 to 67 with GnRHa treatment, similar to those (63 at baseline, 66 at 24 months) in our [Carmichael et al. 2021] study.”<sup>15</sup>

### **THERE IS NO EVIDENCE THAT GENDER-AFFIRMING MEDICAL INTERVENTIONS INCREASE SUICIDALITY**

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<sup>11</sup> Nakagawa S. A farewell to Bonferroni: the problems of low statistical power and publication bias. *Behavioral Ecology*. 2004; 15(6):1044–5.

<sup>12</sup> It’s also worth highlighting this line from the Carmichael study, in which they explain that they also did not detect any worsening in mental health among participants, despite the fact that adolescents with gender dysphoria generally have worsening of mental health while puberty progresses, “...the lack of change in an outcome that normally worsens in early adolescence may reflect a beneficial change in trajectory for that outcome, i.e. that GnRHa [pubertal suppression] treatment reduced this normative worsening of problems.”

<sup>13</sup> Carmichael, P., Butler, G., Masic, U., Cole, T. J., De Stavola, B. L., Davidson, S., ... & Viner, R. M. (2021). Short-term outcomes of pubertal suppression in a selected cohort of 12 to 15 year old young people with persistent gender dysphoria in the UK. *PLoS One*, 16(2), e0243894.

<sup>14</sup> The authors of this study note there are several possibilities, not mentioned by Dr. Cantor, for why the outcomes they examined were not statistically different. These included that the sample size was too small and that, “lack of change in an outcome that normally worsens in early adolescence may reflect a beneficial change in trajectory for that outcome, i.e. that GnRHa treatment reduced this normative worsening of problems.”

<sup>15</sup> *Id.*

14. Dr. Laidlaw cites a study by Dhejne et al.<sup>16</sup> to imply that gender-affirming surgery increases suicidality (Laidlaw, ¶ 212). His interpretation of this study is incorrect. He states that “...the sex-reassigned group had nineteen times the rate of completed suicides and nearly three times the rate of all-cause mortality and inpatient psychiatric care compared to the general population...” However, this general population control group he references consists of cisgender people. This is not an appropriate control group. Transgender people face a range of stressors that affect their mental health, most prominently societal rejection based on being transgender. Though gender-affirming surgery improves mental health (as shown, for example, by Almazan et al.,<sup>17</sup> which used the proper control group of transgender people who desired but did not access surgery), it cannot eliminate societal discrimination, and thus even after surgery, many transgender people still suffer elevated rates of mental health problems compared to cisgender people. Additionally, while surgery may improve mental health by improving certain aspects of gender dysphoria (e.g., improved chest dysphoria with chest surgery), it cannot necessarily improve all domains of gender dysphoria (e.g., chest surgery cannot improve dysphoria related to one’s voice pitch not aligning with one’s gender identity, which may require a separate treatment of voice therapy). This reality of mental health challenges even with gender-affirming care is not a valid argument against the provision of gender-affirming care. To draw a simple analogy, I have many patients with depression and anxiety whose symptoms improve with psychiatric medications, but do not completely abate. This, of course, does not mean that the medications were not effective in improving symptoms. As the Dhejne paper states, “the results should not be interpreted such as

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<sup>16</sup> Dhejne, C., Lichtenstein, P., Boman, M., Johansson, A. L., Långström, N., & Landén, M. (2011). Long-term follow-up of transsexual persons undergoing sex reassignment surgery: cohort study in Sweden. *PLoS One*, 6(2), e16885.

<sup>17</sup> Almazan, A. N., & Keuroghlian, A. S. (2021). Association between gender-affirming surgeries and mental health outcomes. *JAMA Surgery*, 156(7), 611-618.

sex reassignment *per se* increases morbidity and mortality. Things might have been even worse without sex reassignment. As an analogy, similar studies have found increased somatic morbidity, suicide rate, and overall mortality for patients treated for bipolar disorder and schizophrenia. This is important information, but it does not follow that mood stabilizing treatment or antipsychotic treatment is the culprit.” Furthermore, the Dhejne study was published in 2011, and it followed individuals who had surgery when some of the surgical techniques were not as advanced as they are today and discrimination in society was far worse.

15. Dr. Laidlaw also cites a recent paper in *The New England Journal of Medicine* by Chen et al. in which two participants died from suicide (Laidlaw, ¶ 213). However, this does not show or even suggest that gender-affirming medical interventions caused these deaths from suicide. Like the explanation offered in the Dhenje paper, deaths by suicide could have been even higher without provision of gender affirming medical care, and it is widely known that suicidality is unfortunately common among these adolescents, due to dysphoria related to their gender identities not aligning with their physical bodies and the stigma they face in society.<sup>18</sup> Overall, the study by Chen et al. found that mental health *improved* following gender-affirming medical care for adolescents with gender dysphoria, and that this effect was mediated by an increase in congruence between participants’ gender identities and their physical bodies. “During the study period, appearance congruence, positive affect, and life satisfaction increased, and depression and anxiety symptoms decreased. Increases in appearance congruence were associated with concurrent increases in positive affect and life satisfaction and decreases in depression and anxiety

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<sup>18</sup> Turban, J. L., & Ehrensaft, D. (2018). Research review: gender identity in youth: treatment paradigms and controversies. *Journal of Child Psychology and Psychiatry*, 59(12), 1228-1243.

symptoms.”<sup>19</sup> The comparison Dr. Laidlaw makes to numbers from the UK are not useful, as he does not provide any statistical analysis. The reason the consent forms from this study, which Dr. Laidlaw supposedly received through FOIA requests (Laidlaw, ¶ 214), would not have listed death by suicide as a risk of gender-affirming medical care is because death from suicide is not a recognized side effect of gender-affirming medical care. Suicidality, however, is generally recognized as a risk of untreated gender dysphoria.

**DEFENDANTS’ EXPERTS’ DISCUSSION OF CHILDHOOD VERSUS  
ADOLESCENT ONSET OF GENDER DYSPHORIA DOES NOT SUPPORT BANNING  
GENDER-AFFIRMING MEDICAL CARE**

16. Defendants’ experts draw a distinction between those who first come to experience gender dysphoria in early childhood and those who first come to experience gender dysphoria in adolescence (*i.e.*, after the onset of puberty). They imply that those who first recognize gender dysphoria in adolescence will not continue to hold a gender identity different from their sex assigned at birth later in life. There is no evidence to support this claim nor does the law at issue only ban care for those who did not experience gender dysphoria first in early childhood.

17. It is true that some past studies on the benefits of gender-affirming medical care were limited to patient populations who first experienced gender dysphoria in early childhood (e.g., deVries et al. 2014). However, these are not the only studies documenting improved mental health from treatment. Other studies have similarly shown improved mental health for adolescents with gender dysphoria treated with pubertal suppression and gender-affirming hormones in contexts where the studied population was not explicitly limited to those experiencing early

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<sup>19</sup> Chen, D., Berona, J., Chan, Y. M., Ehrensaft, D., Garofalo, R., Hidalgo, M. A., ... & Olson-Kennedy, J. (2023). Psychosocial Functioning in Transgender Youth after 2 Years of Hormones. *New England Journal of Medicine*, 388(3), 240-250.

childhood onset gender dysphoria.<sup>20</sup> Correspondingly, clinical guidelines do not recommend that those who first experience gender dysphoria in adolescence be ineligible for gender-affirming medical care. The WPATH Standards of Care 8, for instance, highlight that those with an absence of gender incongruence during the prepubertal childhood period may warrant “a more extended assessment process,” but are still candidates for care.<sup>21</sup> Likewise, a recent publication from our group found that it is not uncommon for transgender people to first come to understand their transgender identity in adolescence or later.<sup>22</sup> In that sample of over 27,000 transgender adults, 40.8% reported first coming to realize their transgender identity during adolescence or adulthood. Though one’s transgender identity has a strong biological basis,<sup>23</sup> it can take some time for individuals to ascribe language to their transgender identity or gender dysphoria, and it can also take a substantial period of time to overcome the stigma associated with a transgender identity to be able to openly accept one’s transgender identity. Thus, a lack of expressed early childhood gender incongruence does *not necessarily* indicate less severe gender dysphoria, or that gender-affirming medical care will not be effective. Though as the WPATH Standards of Care note, it may necessitate an extended biopsychosocial assessment period.<sup>24</sup>

18. Dr. Cantor raises “particular concern” that adolescent-onset gender dysphoria may “actually represent” borderline personality disorder (BPD). (Cantor, ¶ 161). There is no evidence

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<sup>20</sup> Of note, many of these studies do not state the age at which participants first experienced gender dysphoria, but because many patients presenting to clinics in recent years first come to express identifying their gender dysphoria in adolescence, these are likely mixed groups.

<sup>21</sup> Coleman, E., Radix, A. E., Bouman, W. P., Brown, G. R., De Vries, A. L., Deutsch, M. B., ... & Arcelus, J. (2022). Standards of care for the health of transgender and gender diverse people, version 8. *International Journal of Transgender Health*, 23(sup1), S1-S259

<sup>22</sup> Turban, J. L., Dolotina, B., Freitag, T. M., King, D., & Keuroghlian, A. S. (2023). Age of Realization and Disclosure of Gender Identity Among Transgender Adults. *Journal of Adolescent Health*, 72(6), 852-59.

<sup>23</sup> Diamond, M. (2013). Transsexuality among twins: identity concordance, transition, rearing, and orientation. *International Journal of Transgenderism*, 14(1), 24-38.

<sup>24</sup> Coleman, E., Radix, A. E., Bouman, W. P., Brown, G. R., De Vries, A. L. C., Deutsch, M. B., ... & Arcelus, J. (2022). Standards of care for the health of transgender and gender diverse people, version 8. *International Journal of Transgender Health*, 23(sup1), S1-S259.

to support this theory. However, existing guidelines emphasize the importance of a comprehensive biopsychosocial mental health evaluation, designed to differentiate other mental health conditions (e.g., BPD or body dysmorphic disorder, from gender dysphoria), prior to initiating gender-affirming medical care. Of note, a recent peer-reviewed paper in *The Harvard Review of Psychiatry* emphasized the ways in which certain potential indicators of other conditions, like BPD, can be differentiated from gender dysphoria.<sup>25</sup> It also noted that it is rare for BPD to lead to a transgender identity through “identity diffusion.”<sup>26</sup>

**DEFENDANTS’ EXPERTS’ ASSERTION THAT SOCIAL TRANSITION AND/OR GENDER-AFFIRMING MEDICAL CARE INTENSIFY GENDER INCONGRUENCE IS NOT SUPPORTED BY EVIDENCE**

19. Defendants’ experts spend a considerable portion of their declarations discussing social transition. This refers to when a transgender person adopts a gender expression (*i.e.*, a name, pronouns, clothes, etc.) that aligns with their gender identity. This does not involve any of the medical interventions banned by the Oklahoma law at issue in this case. Nevertheless, it is worth noting that the assertions made by Defendants’ experts about social transition are not supported by evidence.

20. Despite Dr. Cantor spending a considerable portion of his declaration on the importance of differentiating correlation from causation, he appears unable to apply that to the findings that social transition is correlated with “persistence.” He outlines data showing that youth who socially transition are more likely to continue to identify as transgender later in life (*i.e.*, correlation). But this correlation could be due to two possibilities: (1) social transition could influence a child’s gender identity, making them identify more strongly as transgender and thus

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<sup>25</sup> Goldhammer, H., Crall, C., & Keuroghlian, A. S. (2019). Distinguishing and addressing gender minority stress and borderline personality symptoms. *Harvard Review of Psychiatry*, 27(5), 317-25.

<sup>26</sup> *Id.*

more likely to persist, or (2) children who go on to socially transition identified more strongly as transgender than those who did not *prior* to social transition, and thus their pre-transition gender incongruence lead to the social transition in the first place.

21. Research by Rae et al. has shown that the second possibility is far more likely to be what is occurring.<sup>27</sup> Rae et al.’s 2019 study showed that gender identification is not significantly different before and after a social transition, but that those who ultimately underwent a social transition had a greater degree of gender incongruence *prior to social transition*.<sup>28</sup> The study made clear that this correlation—between pre-pubertal social transition and transgender identity—is because those who undergo a pre-pubertal social transition had stronger discordance between their sex assigned at birth and their gender identity to begin with, and that social transition itself does not appear to increase gender discordance.

22. Defendants’ experts proceed to point to studies showing that “the overwhelming majority” of transgender adolescents who start pubertal suppression go on to future additional gender-affirming medical interventions, in order to suggest that pubertal suppression increased these adolescents’ gender incongruence and thus likelihood of “persistence” (Laidlaw, ¶ 113-114). It is another logical fallacy to infer that a study showing that the majority of adolescents on puberty blockers proceeding on to future gender-affirming medical interventions is evidence that puberty blockers increase the likelihood of persistence; rather, it is just as possible, and in my opinion more likely, that, given the comprehensive biopsychosocial mental health assessment that is done prior to starting gender-affirming medical interventions under current guidelines, the adolescents who

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<sup>27</sup> Rae, J. R., Gülgöz, S., Durwood, L., DeMeules, M., Lowe, R., Lindquist, G., & Olson, K. R. (2019). Predicting early-childhood gender transitions. *Psychological Science*, 30(5), 669-81.

<sup>28</sup> Dr. Laidlaw also references a line from the Endocrine Society Guidelines stating that “[social] transition is associated with the persistence of GD/gender incongruence as a child progresses into adolescence” (Laidlaw, ¶ 55). What he fails to highlight is that this is *association not causation*, and that, as Rae et al. suggests, this association is because those who are transgender are more likely to pursue a social transition, rather than a social transitioning making someone identify more strongly as transgender.

started pubertal suppression were those who were, through medical and mental health screening, determined, prior to starting pubertal suppression, to have a low likelihood of future desistence in their transgender identity.

**DEFENDANTS’ EXPERTS’ SUGGESTION THAT GENDER-AFFIRMING TREATMENT SHOULD NOT BE AVAILABLE BECAUSE GENDER DYSPHORIA IS THE RESULT OF “SOCIAL CONTAGION” AND “RAPID ONSET GENDER DYSPHORIA” IS WITHOUT BASIS**

23. Defendants’ experts suggest that gender-affirming medical care should be banned because, they claim, peer influence is responsible for adolescents seeking gender-affirming medical care that they will later come to regret. They assert that “social contagion” is the driver of gender dysphoria and that there is a common phenomenon of “rapid-onset gender dysphoria” or ROGD. Such a view is not supported by evidence.

24. Defendants’ experts use or allude to the term “rapid onset gender dysphoria” – failing to note that this is not a recognized mental health condition.<sup>29</sup> The term “rapid onset gender dysphoria” entered the literature in 2018 through a publication by Dr. Lisa Littman.<sup>30</sup> Soon after the initial publication of Dr. Littman’s article, a correction was published.<sup>31</sup> The correction noted, “Rapid onset gender dysphoria (ROGD) is not a formal mental health diagnosis at this time . . . This report did not collect any data from the adolescents and young adults (AYAs) or clinicians and therefore does not validate the phenomenon.”<sup>32</sup> The correction goes on to say “the term should not be used in any way to imply that it explains the experiences of all gender dysphoric youth...”

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<sup>29</sup> Littman, L. (2019). Correction: Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. *PLoS One*, 14(3), e0214157.

<sup>30</sup> Littman, L. (2018). Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports. *PLoS One*, 13(8).

<sup>31</sup> Littman, L. (2019). Correction: Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. *PLoS One*, 14(3), e0214157.

<sup>32</sup> A recent study by Bauer et al. in *The Journal of Pediatrics* examined some of the associations that would be consistent with the existence of “rapid-onset gender dysphoria” and concluded that their results “did not support the rapid onset gender dysphoria hypothesis.” Bauer, G. R., Lawson, M. L., Metzger, D. L., & Trans Youth CAN!



25. The Littman study was an anonymous online survey of the parents of transgender youth, recruited from websites where this notion of “social contagion” leading to transgender identity is popular (*e.g.*, one website was called “Transgender Trend”).<sup>33</sup> The anonymous survey participants were asked what they thought was the etiology of their children’s transgender identity. Some of these parents believed that their children became transgender as a result of watching transgender-related content on websites like YouTube and having LGBTQ friends. The alternative interpretation, and in my opinion more likely interpretation, is that these youth sought out transgender-related media and LGBTQ friends because they wanted to find other people who understood their experiences and could offer support. The parent respondents also noted that, from their perspective, their children became transgender “all of a sudden,” hence the term “rapid onset.” Once again, the problem here is that the study did not interview the adolescents themselves, nor their healthcare providers. It is common for transgender (as with gay, lesbian, and bisexual) children and adolescents to conceal their identity from their parents for long periods of time. In a recent study from our research group, transgender people who first understood their gender identity in childhood waited a median 14 years before sharing this with another person.<sup>34</sup> In my experience working with transgender youth and adults, the reasons for this tend to be out of fear of negative repercussions (rejection, being kicked out of the house, or even physical assault) if their parents were to find out that they are transgender. Children often learn to conceal their gender non-conforming behaviors and transgender identity early, particularly if their parents have strong negative reactions to them exhibiting gender non-confirming behavior.

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Research Team. Do Clinical Data from Transgender Adolescents Support the Phenomenon of "Rapid Onset Gender Dysphoria"? *The Journal of Pediatrics*, S0022-3476.

<sup>33</sup> Littman, L. (2018). Parent reports of adolescents and young adults perceived to show signs of a rapid onset of gender dysphoria. *PLoS One*, 13(8), e0202330.

<sup>34</sup> Turban, J. L., Dolotina, B., Freitag, T. M., King, D., & Keuroghlian, A. S. (2023). Age of Realization and Disclosure of Gender Identity Among Transgender Adults. *Journal of Adolescent Health*, 72(6), 852-59.

26. Dr. Cantor attempts to add credence to this 2018 Littman study by stating that it was “independently replicated by another study.” (Cantor, ¶ 137). The “replicated” study (the “Diaz Study”)<sup>35</sup> referenced by Dr. Cantor used the same methodology as the original Littman study of recruiting participants from websites where the idea of “social contagion” is popular, and thus carries the same limitations. Specifically, the Diaz study used an identical methodology to the one used by Dr. Littman in her paper, and recruited participants from a website called “ParentsofROGDKids.com.” Once again, the only thing that this study shows is that a number of people online have the belief that the politicized notion of ROGD is true. Due to this biased methodology, the Diaz study referenced by Dr. Cantor likewise does not establish that ROGD is a valid mental health diagnosis. Furthermore, after publication, the Diaz study was updated with a notification from the journal stating, “readers are alerted that concerns have been raised regarding methodology as described in this article. The publisher is currently investigating this matter and a further response will follow the conclusion of this investigation.”<sup>36</sup> The author of the paper subsequently announced that the paper was retracted, stating: “I have just been notified that my paper with Susanna Diaz will be retracted by the publisher due to concerns about the lack of informed consent.”<sup>37</sup> Also of note, the original paper contains a notation that the first author “Susanna Diaz” is a pseudonym – an unusual practice in peer-reviewed journals.<sup>38</sup>

27. Defendants’ experts assert that the increase in referrals to gender clinics over the past few decades supports a “social contagion” theory. It does not. The increase in referrals has

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<sup>35</sup> Diaz, S., & Bailey, J. M. (2023). Rapid Onset Gender Dysphoria: Parent Reports on 1655 Possible Cases. *Archives of Sexual Behavior*, 52(3), 1031-43.

<sup>36</sup> *Id.*

<sup>37</sup> Blanchard, R. Statement on Twitter May 23, 2023. Available at: <https://twitter.com/profjmb/status/1661022522446610434?s=20>. Accessed: May 28, 2023.

<sup>38</sup> It is notable that Dr. Cantor will rely on a single survey study (at most one corrected survey study and one retracted survey study) when they seem to support his conclusions regarding ROGD, but will discount over a dozen higher-quality studies linking access to gender-affirming medical care to improved mental health outcomes for adolescents with gender dysphoria.

coincided with increased visibility of transgender people in society and greater awareness of gender dysphoria and available medical care to treat it. Whereas parents in the past may have had limited literacy regarding gender diversity in adolescents, today more Americans, as well as people around the world, have greater understanding of the experiences of transgender youth. This fact has undoubtedly increased the number of parents bringing their adolescents to gender clinics for evaluation. Additionally, as researching documenting improvements in mental health following gender-affirming medical care for adolescent gender dysphoria has accumulated, insurance coverage of gender-affirming medical interventions has improved, meaning that more families are able to afford care, which results in an increase in referrals for evaluation. Of note, not all adolescents who present for treatment ultimately go on to receive gender-affirming medical interventions.<sup>39</sup> In fact, in a large study from a Netherlands gender clinic, the percentage of patients who presented for evaluation who actually started any kind of gender-affirming treatment has decreased over time.<sup>40</sup> As the authors of that study note, “this finding may be explained by the fact that in the past it was harder to find information about [gender dysphoria] and its treatment, and only people with extreme types of [gender dysphoria] managed to visit our gender identity clinic for treatment. Currently, owing to media attention and the internet, it is easier to access information about our gender identity clinic, making the threshold lower to search for help.” This shows that while more people may be coming in for evaluation, the criteria for diagnosis and treatment remain stringent and a smaller percentage of patients are actually being diagnosed with gender dysphoria and referred on for medical treatment.

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<sup>39</sup> Wiepjes, C. M., Nota, N. M., de Blok, C. J., Klaver, M., de Vries, A. L., Wensing-Kruger, S. A., ... & den Heijer, M. (2018). The Amsterdam cohort of gender dysphoria study (1972–2015): trends in prevalence, treatment, and regrets. *The Journal of Sexual Medicine*, 15(4), 582-590.

<sup>40</sup> *Id.*

28. Some have raised the notion that if decreased stigma were driving the higher rates of adolescents openly identifying as transgender, we should be witnessing a parallel rise in gender dysphoria among, say, middle-aged adults. However, transgender middle-aged adults have endured decades of stigma for their transgender identities that, despite improvements in contemporary social attitudes, make them far less likely to come out as transgender. The “gender minority stress” model explains that these decades of exposure to unaccepting environments leads to expectations of future rejection and internalized transphobia (i.e., internalization of society’s negative messages about transgender people leading to hate of oneself for being transgender), as well as identity concealment.<sup>41</sup> These factors make it less likely for middle-aged transgender adults to come out, despite the recently observed increase in societal acceptance for transgender people in the United States. Transgender youth are, for the first time, growing up in environments where transgender identity is not as stigmatized, making it easier for them to come out when compared to transgender adults plagued by anxiety due to decades of living in societies where being transgender was not recognized or accepted.

**DEFENDANTS’ EXPERTS’ CLAIMS THAT “SELF-REPORT” AND “SURVEY” DATA ARE NOT VALID REPRESENT A MISUNDERSTANDING OF PSYCHIATRIC RESEARCH**

29. Clinical psychiatry relies heavily on self-report and data collected via questionnaires. Defendants’ experts’ claims that self-report and “survey” data are not valid represent a broad misunderstanding of psychiatry (Cantor, ¶56-58). Clinical psychiatry and clinical psychiatric research almost always involve patient reports of their symptoms. Because psychiatric conditions (*e.g.*, generalized anxiety disorder, major depressive disorder, schizophrenia, obsessive

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<sup>41</sup> Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460.

compulsive disorder, and gender dysphoria, among many others) do not have laboratory tests, diagnosis is made largely based on patient reports of their symptoms. At times these may be supplemented by reports from parent and clinician observations, particularly for establishing a diagnosis; however, they are not considered standard or necessary in clinical trials that track symptoms over time or compare the mental health of those receiving treatment to those not receiving treatment. The studies cited throughout my initial declaration employed commonly used and *validated* self-report psychometric measures including the Kessler-6 measure of past-month severe psychological distress,<sup>42</sup> Beck Depression Inventory II,<sup>43</sup> and self-report measures from the National Institutes of Health Toolbox Emotion Battery.<sup>44</sup> These self-report instruments are standard in psychiatric research. Of note, defendants' experts repeatedly cite survey research in their own reports (*e.g.*, Littman 2018,<sup>45</sup> Diaz 2023,<sup>46</sup> Littman 2021<sup>47</sup>).

30. It is worth highlighting that there exist both high-quality and low-quality survey methodologies. For example, Littman 2018 has been criticized for asking leading questions to a group that is ideologically focused, making it easy for participants to intentionally bias results and analyses.<sup>48</sup> In contrast to the Littman survey, the 2015 US Transgender Survey had over 180

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<sup>42</sup> Kessler, R. C., Green, J. G., Gruber, M. J., Sampson, N. A., Bromet, E., Cuitan, M., ... & Zaslavsky, A. M. (2010). Screening for serious mental illness in the general population with the K6 screening scale: results from the WHO World Mental Health (WMH) survey initiative. *International Journal of Methods in Psychiatric Research*, 19(S1), 4-22.

<sup>43</sup> Beck, A. T., Steer, R. A., & Brown, G. (1996). Beck depression inventory–II. *Psychological Assessment*.

<sup>44</sup> Slotkin, J., Nowinski, C., Hays, R., Beaumont, J., Griffith, J., Magasi, S., & Gershon, R. (2012). NIH Toolbox scoring and interpretation guide. *Washington (DC): National Institutes of Health*, 6-7.

<sup>45</sup> Littman, L. (2018). Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports. *PloS One*, 13(8).

<sup>46</sup> Diaz, S., & Bailey, J. M. (2023). Rapid Onset Gender Dysphoria: Parent Reports on 1655 Possible Cases. *Archives of Sexual Behavior*, 52(3), 1031-1043.

<sup>47</sup> Littman, L. (2021). Individuals treated for gender dysphoria with medical and/or surgical transition who subsequently detransitioned: A survey of 100 detransitioners. *Archives of Sexual Behavior*, 50(8), 3353-3369

<sup>48</sup> Littman, L. (2018). Rapid-onset gender dysphoria in adolescents and young adults: A study of parental reports. *PloS One*, 13(8).

questions across 32 sections.<sup>49</sup> If participants were to attempt to bias the results in a certain direction, they would have needed to answer questions at distant parts of the survey in a particular fashion, based on what study design they believed researchers would use. Our analyses also utilized regression analyses that adjusted for a range of potentially confounding variables, further adding to the complexity of the analyses and how difficult it would be for study participants to intentionally bias results. Of note, the analysis plans for our group's studies were designed only after the 2015 USTS was already administered.

**DR. CANTOR'S PUBLISHED CRITIQUE OF THE AMERICAN ACADEMY OF  
PEDIATRICS GUIDELINES IS IRRELEVANT TO BANS ON GENDER-AFFIRMING  
MEDICAL CARE**

31. Dr. Cantor asserts that his “most cited peer-reviewed paper relating to gender dysphoria in minors illustrates the expertise in the evaluation of scientific evidence that [he has] and [is] known for” (Cantor, ¶ 13), citing his 2019 publication in the *Journal of Sex & Marital Therapy*.<sup>50</sup> According to the National Institute of Health's PubMed library of peer-reviewed research, it has been cited only three times as of June 26, 2023.<sup>51</sup> The paper itself does not discuss pubertal suppression, gender-affirming hormones, or gender-affirming surgery. Rather, it solely discusses approaches to supporting *pre-pubertal children*. It thus is not relevant to Oklahoma's ban on gender-affirming medical care, which is not considered or prescribed until after the onset of puberty.

**CONCLUSION**

32. In summary, the reports from Defendants' experts do not provide justification for banning gender-affirming medical care for adolescents with gender dysphoria. Their view, that

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<sup>49</sup> James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). The Report of the 2015 U.S. Transgender Survey. Washington, DC: National Center for Transgender Equality.

<sup>50</sup> Cantor, J. M. (2020). Transgender and gender diverse children and adolescents: fact-checking of AAP policy. *Journal of Sex & Marital Therapy*, 46(4), 307-313.

<sup>51</sup> PubMed entry for *Id.* Available at: <https://pubmed.ncbi.nlm.nih.gov/31838960/>. Accessed: June 6, 2023.

gender-affirming medical care for adolescents with gender dysphoria should be legislatively banned, is a fringe view, not consistent with mainstream medicine or science.<sup>52</sup> None of the handful of European countries they cite have banned care in the manner that Oklahoma proposes. All major medical organizations in the United States disagree with the views expressed by Defendants' experts about the banned treatments.<sup>53</sup>

33. Under current guidelines, medical interventions for adolescents with gender dysphoria are only considered after a comprehensive biopsychosocial evaluation, consent is provided by legal guardians, assent is provided by the patient, and all stakeholders (patient, guardians, mental health professional, prescriber) are in agreement that the benefits outweigh the risks for a given adolescent.

34. As I have outlined above and in my initial declaration, there is a substantial body of literature showing that gender-affirming medical care results in better mental health outcomes for adolescents with gender dysphoria. This research is consistent with the decades of clinical experience from around the world of improved mental health outcomes from these interventions. Furthermore, there are no evidence-based alternatives for treating gender dysphoria. While Defendants' experts critique the literature regarding the benefits of gender-affirming medical care, the studies they present on rapid-onset gender dysphoria and social contagion meet none of their proposed criteria for what research they would consider valid. Though they repeatedly advocate for "psychotherapy" alternatives to gender-affirming medical care, they fail to cite a single study showing that such strategies are effective, let alone superior to gender-affirming medical interventions, which have well-documented benefits. While no treatment in medicine can

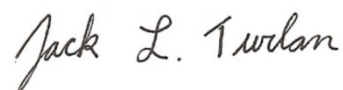
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<sup>52</sup> For a list of statements from major medical organizations opposing legislative bans on gender-affirming medical care for adolescent gender dysphoria, please see Turban, J. L., Kraschel, K. L., & Cohen, I. G. (2021). Legislation to criminalize gender-affirming medical care for transgender youth. *JAMA*, 325(22), 51-2252.

<sup>53</sup> *Id.*

guarantee a 100% success rate, it is essential that physicians be able to consider, on a case-by-case basis, and in collaboration with an adolescent patient and their parents, what medical treatment is most likely to help a patient. The Oklahoma ban would leave physicians, adolescents, and their parents without any evidence-based treatments for adolescent gender dysphoria, a condition that can cause immense suffering.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

A handwritten signature in black ink that reads "Jack L. Turban". The signature is written in a cursive, flowing style.

Executed on: July 7, 2023

JACK L. TURBAN, MD, MHS